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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,229	07/11/2003	Young-Chan Kim	1293.1854	2343

21171 7590 08/09/2006

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EXAMINER	
RAHMJOO, MANUCHER	
ART UNIT	**PAPER NUMBER**
2628	

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/617,229	KIM, YOUNG-CHAN	
	Examiner	Art Unit	
	Mike Rahmjoo	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 July 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 1- 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over King et al (US Patent 5,644,325), hereinafter, King in view of Yamakawa et al (US Patent 5,809,366), hereinafter, Yamakawa.

As per claims 1, 4- 5, 7, 11- 12 and 14 and as to the broadest reasonable interpretation by examiner, King teaches receiving RGB signals from host (col. 16 line 55 corresponding to host) see for example figures 10- 11; and selecting an R, a G, or a B component of an RGB signal (see for example col. 3 lines 23- 27 for the selection of color blue and claims 2 and 3 wherein level select circuit controls the level of each R or G or B independently to control a color mixture) including a video signal as a selected RGB component see for example column 5 lines 38- 40 and setting a region (color key range) of the selected R,G,B signal to be checked see for example column 7 line 25.

However King does not teach detecting a minimum pixel level value in the checked region of the selected R,G,B component and comparing the minimum pixel

level value for the selected R,G,B component with a predetermined threshold value and checking whether an abnormal R,G,B component includes an abnormal video signal; and displaying on a screen a message indicator indicating whether the selected R,G,B component includes an abnormal video signal; and signal input unit receiving RGB signals, a horizontal and vertical synchronization signal; and a storage unit storing the minimum pixel level value detected in the particular region of the selected R,G,B component.

Yamakawa teaches detecting a minimum pixel level value (determining the exact colors defining the point corresponding detecting minimum pixel level value to the colors of these points as said colors deviate the expected result by more than an allowable range wherein said deviation may assume any values in the minimum range and or maximum range see col. 14 lines 27- 30) in the checked region of the selected R,G,B component see for example column 14 lines 27- 31 for points deviated by more than an allowable range corresponding to the detecting a minimum pixel level; comparing the minimum pixel level value for the selected R,G,B component with a predetermined threshold value (previous RGB data or allowable range) and checking whether an abnormal R,G,B component includes an abnormal video signal see for example column 14 lines 35- 38 wherein RGB data is compared with previous RGB data and correction is based on the results of comparison; and displaying on a screen a message indicator (corresponding to displaying a warning) indicating whether the selected R,G,B component includes an abnormal video signal see for example column 14 lines 27- 35 through displaying a warning (a flag generated by the color calibration

system) due to deviation by more than an allowable range OR improper reading of data; and signal input unit receiving RGB signals, a horizontal and vertical synchronization signal see for example figures 3- 5 for the color calibration system corresponding to the input unit for receiving RGB signals; a storage unit storing the minimum pixel level value detected in the selected R,G,B component see for example the color calibration system of figures 4- 5 corresponding to the storage unit.

It would have been made obvious to one of ordinary skilled in the art at the time the invention was made to incorporate the teachings of Yamakawa into King to perform minimum pixel level detection and comparison with a predetermined threshold value and thereafter displaying of a screen message as to provide a color balance selection method which allows a user to select the color balance relative to the calibrated standard of an image processing device and therefore reproduce colors contained in a specific image chosen by a user and thereby offer an efficient and user friendly device see for example column 2 lines 7-23.

As per claims 2 and 9 Yamakawa teaches setting a flag (warning) which indicates whether the selected R,G,B component is abnormal when the minimum pixel level value is smaller (deviation by more than an allowable range) than a predetermined threshold value see for example column 14 line 32, and resetting (execute scanning again or repeat the process) the flag when the minimum pixel level value is larger (deviation by more than an allowable range) than the predetermined threshold value see for example column 14 lines 32- 33.

As per claim 3 and 10 Yamakawa teaches checking whether a flag indicating whether the selected R,G,B component is abnormal is set see for example figure 17 for the loop in the flow chart regarding the display warning block 494; checking if a video signal checking function is enabled when the flag is set see for example figure 17 (block 490) for the flow chart regarding color determination (checking) of the colors of the printed frames; and inherently teaches setting how long the message will be displayed and how long a predetermined warning message is displayed, when enabling of the video signal checking function is confirmed see for example column 14 lines 41- 46 through the clock of the color calibration system which reduces the time (time setting for displaying a message) needed to perform the color balance adjustment along with reducing a load imposed on the processing system.

As per claims 6 and 15 and as to the broadest reasonable interpretation by examiner Yamakawa teaches the controller generates an on-screen-display (OSD) signal (displaying a warning) that enables and disables (the flow chart of figure 17) an R,G,B signal checking function.

As per claim 8 and in view of the rejection of the independent claims Yamakawa teaches extracting a minimum pixel level value when the pixel level value in the selected R,G,B component is smaller than the predetermined value see for example figure 21 and column 14 lines 27- 30 for points 530- 533 when there is deviation more than a allowable range.

As per claim 13 and in view of the rejection of the independent claims Yamakawa teaches a comparator (color calibration system) comparing the minimum pixel level

value in the selected R,G,B component with a minimum pixel level value detected in a previous signal (see for example column 14 line 36 fro comparing RGB data with previous RGB data), and extracts a minimum pixel level value see for example column 14 lines 30- 31 for improper reading or inputting due to deviation by more than an allowable range.

Response to Arguments

Applicant's arguments filed 07/07/2006 have been fully considered but they are not persuasive.

As per applicant's remarks on page 7, applicant argues "Absent from Yamakawa et al is any teaching or suggestion of checking a portion of a selected R,G, or B component of an RGB signal ".

Examiner respectfully disagrees.

Examiner recites portions of claim 1 which recite "setting a region of the selected R,G,B component to be checked" and "detecting a minimum pixel level value in the checked region of the selected R,G,B component" and points out to said portion as reciting a region of said components and not a region of an individual components. As such examiner points out to the same rejection made of the record which recites "detecting (state detection through determination) a minimum pixel level value in the checked region of the selected R,G,B component see for example column 14 lines 27-31 for points deviated by more than an allowable range corresponding to the detecting a

minimum pixel level". It is also unclear what applicant is referring to as "pixel level". Appropriate correction or clarity of said claim language is respectfully requested.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Rahmjoo whose telephone number is 571-272- 7789. The examiner can normally be reached on 8 AM- 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee Tung can be reached on 571-272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Rahmjoo

July 20, 2006

KEE M. TUNG
SUPERVISORY PATENT EXAMINER